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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,479	10/16/2003	Sean Colbath	BBNT-P01-199	5448
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EXAMINER PYO, MONICA M				
ART UNIT 2161		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Office Action Summary

Application No.

10/685,479

Applicant(s)

COLBATH ET AL.

Examiner

MONICA M. PYO

Art Unit

2161

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 12/31/07, 12/21/07
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

A DETAILED ACTION

1. This communication is responsive to the Amendment filed 3/17/2008.
2. Claims 1-19 are currently pending in this application. Claims 1, 9, 16 and 18 are independent claims. Claims 12-15 were withdrawn and claims 1-11 and 16-19 are examined. Claims 1-11 and 16-19 are rejected. This action is made Final.

Information Disclosure Statement

3. The information disclosure statement (IDS) submitted on 12/13/2007 and 12/21/2007 was filed and being considered by the Examiner.

Claim Rejections - 35 USC § 112

4. The claim amendment received on 3/17/2008. The changes are acknowledged and therefore, the 35 U.S.C. 112, first paragraph rejections made in a prior Office Action are withdrawn.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-11 and 16-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,026,388 issued to Liddy et al. (hereinafter) in view of U.S. Patent No. 6,778,979 issued to Grefenstette et al. (hereinafter Grefenstette) and further in view of U.S. Patent No. 6,266,667 issued to Olsson et al. (hereinafter Olsson).

Regarding Claims 1, 9 and 18, Liddy disclose a method of creating labels for clusters of documents, comprising:

A). identifying topics associated with the documents in the clusters, as a newspaper articles or titles from documents (Liddy: col. 25, lns. 30-37),

B). determining whether the topics are associated with the documents in the clusters, as the user being able to indicate those documents deemed most relevant by highlighting document titles or summaries (Liddy: col. 25, lns. 38-45);

D). forming labels for the clusters from the cluster lists, as the newspaper article or titles from documents are used to form labels for clusters (Liddy: col. 25, lns. 14-45).

Liddy does not explicitly disclose:

B)/C). at least half of,

C). adding ones of the topics that are associated with the documents in the clusters to cluster lists; and.

However, Grefenstette discloses:

C). adding ones of the topics that are associated with the documents (i.e., classification labels from document contents) in the clusters to cluster lists (i.e., existing class), as to the classification labels are being generated for the document content <i.e., terms and entities> to assign documents class labels into an existing class (Grefenstette: col. 49, lns. 18-48; col. 50, lns. 1-11); and

It would have been obvious to a person with ordinary skill in the art at the time of invention to modify the teachings of Liddy with the teachings of Grefenstette to utilize the cluster labels with the motivation to enhance the automatic generation of a query method (Grefenstette: col. 2, lns. 66-col. 3, lns. 15).

Liddy and Grefenstette do not explicitly disclose:

B)/C). at least half of.

However, Olsson discloses:

B)/C). at least half of, as a most of documents in a group (Olsson: col. 2, lns. 49-62).

It would have been obvious to a person with ordinary skill in the art at the time of invention to modify the teachings of Liddy and Grefenstette with the teachings of Olsson to utilize the idea of most documents in a same cluster group with the motivation to enhance the method of finding and retrieving relevant electronic information (Olsson: col. 1, lns. 9-13).

Regarding Claim 2, Liddy and Grefenstette and Olsson discloses the method wherein the identifying topics includes: using a probabilistic Hidden Markov Model to determine the topics (Grefenstette: col. 25, lns. 60-67).

Regarding Claim 3, Liddy and Grefenstette and Olsson discloses the method wherein the forming labels includes:

ranking the ones of the topics (Grefenstette: col. 36, lns. 1-23) and

placing the ones of the topics in the labels in ranked order (Grefenstette: col. 35, lns. 34-53).

Regarding Claims 4 and 10, Liddy and Grefenstette and Olsson disclose the method wherein the ranking the ones of the topics includes:

assigning ranks to the ones of the topics based on a number of the documents with which the ones of the topics are associated (Liddy: col. 21, lns. 28-52) and (Grefenstette: col. 35, lns. 34-53; col. 36, lns. 1-23).

Regarding Claims 5 and 17, Liddy and Grefenstette and Olsson disclose the method further comprising:

ranking the ones of the topics based on a number of the documents with which the ones of the topics are associated (Liddy: col. 21, lns. 22- 60; col. 24, lns. 10-51; col. 25, lns. 30-67; col. 26, lns. 14-26) and (Olsson: col. 2, lns. 49-62).

Regarding Claim 6, Liddy and Grefenstette and Olsson disclose the method wherein when a first one of the ones of the topics, as a first topic, is associated with a majority of the documents in one of the clusters and a second one of the ones of the topics, as a second topic, is associated with less than the majority of the documents in the one of the clusters, the first topic is ranked higher than the second topic (Liddy: col. 10, lns. 1-11; col. col. 21, lns. 59-67; col. 26,

lns. 14-39) and (Olsson: col. 2, lns. 49-62).

Regarding Claim 7, Liddy and Grefenstette and Olsson disclose the method wherein the ranking the ones of the topics includes: assigning higher ranks to first ones of the ones of the topics that are associated with larger numbers of the documents than second ones of the ones of the topics that are associated with smaller numbers of the documents (Liddy: col. 21, lns. 22-45; col. 26, lns. 1-27; col. 33, lns. 4-8, 11-26; col. 33, lns. 65- col. 34, lns. 9).

Regarding Claim 8, Liddy and Grefenstette and Olsson disclose the method wherein the forming labels includes:

sorting the cluster lists based on the rankings of the ones of the topics (Liddy: col. 3, lns. 42-48).

Regarding Claim 11, Liddy and Grefenstette and Olsson disclose the system wherein the means for generating a label includes:

means for sorting the one or more of the topics based on the ranking to form the label for the cluster (Liddy: col. 3, lns. 42-48; col. 25, lns. 34-41).

Regarding Claim 16, this claim is also rejected based upon the same reasoning as Claims 1, 9 and 19 above. Additionally, Liddy discloses a topic detection system, comprising:

a decision engine configured to;

A). receive a plurality of documents, as a large portion of the retrieved documents (Liddy: col. 25, lns. 3-23) ,and

B). group the documents into a plurality of clusters, as a document clustering (Liddy: col. 25, lns. 14-29); and

Regarding Claim 19, Liddy and Grefenstette and Olsson disclose the method wherein the number of the documents is equal to approximately half of the documents in the cluster (Liddy: col. 25, lns. 14-45) and (Olsson: col. 2, lns. 49-62).

Response to Arguments

7. Applicant's arguments filed 3/17/2008 have been fully considered but they are not persuasive.

Applicant argues that Liddy in view of Grefenstette, and further in view of Olsson do not disclose the feature of “adding ones of the topics that are associated with at least half of the documents in the clusters to cluster lists.” However, the Examiner disagrees with this argument. As stated in the above rejections, Grefenstette discloses in col. 49, lines 18-48 and in col. 50, lines 1-11 the features of generating the set of categories and the classification labels for the document content (i.e., topics associated with the documents content); and assigning (i.e., adding) the document content to an existing label or to an existing class (i.e., seven and up are categorized to be most relate to the class of document). Olsson also discloses in col. 2, lines 49-62 the feature of documents being divided into many different groups and for each group of the

users are clustered in a nearest 'neighbor' style (i.e., users or topics which are mostly associating with the document). Olsson further discloses that the users' opinion in the same group/class is compared and if the users have the same opinions for most of the documents in a group, but they haven't read all of the documents, then it is likely that the users would like the other unread documents of the group as well (col. 2, lines 49-62). Thus, Liddy in view of Grefenstette, and further in view of Olsson disclose what has been claimed as explained above.

It should be noted that the rejections regarding these claims are made under 35 U.S.C. 103(a) and the test for obviousness is whether the combined teaching of the references would have suggested the combination to one of ordinary skill in the art. One can not show non-obviousness by attacking references individually where, as here, the rejections is based on a combination of references. It should be also noted that a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art, including nonpreferred embodiments. See MPEP 2123 [R-5] (I).

Applicant argues that Liddy in view Grefenstette, and further in view of Olsson do not disclose the feature of "ranking the ones of the topics based on a number of the documents with which the ones of the topics are associated." However, the Examiner disagrees. Liddy discloses the method of clustering documents using an algorithm that compares all document vectors and creates clusters of documents with similarly weighted vectors (i.e., ranking) in col. 25, lines 14-67. Liddy further discloses how the documents are ordered within folders by certain types of values (col. 24, lns. 11-13) and "Documents that have scores <i.e., ranking> sufficient to pass either user selected cut-off for the number of documents displayed or the system determined cut-

off for relevance” (col. 24, lns. 33-39). Thus, Liddy’s teaching is valid to read on the above claimed limitation.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MONICA M. PYO whose telephone number is (571)272-8192. The examiner can normally be reached on Mon & Thur 7:00 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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6/26/08

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Supervisory Patent Examiner, Art Unit 2161